

REMARKS

In the Office Action, claims 1-9 were rejected under 35 U.S.C. §103(a) as being unpatentable over Barri (U.S. Pat. Pub. No. 2005/0014563).

The Barri Invention

Barri teaches an interactive game for use with a conventional DVD player (24) configured to play DVD-video discs as described in detail at paragraphs [0033] to [0035] and by reference to Fig. 4 of the document. In particular, players are able to control the DVD player and hence game flow of the interactive game by activating various buttons on remote controls (36a, 36b).

The remote controls (36a, 36b) are interfaced with the DVD player (24) via a communication subsystem (34) wherein the remote controls (36a, 36b) serve as wired external inputs into the communication subsystem (34) and the communication subsystem (34) includes an LED (38) configured to transmit wireless commands to the DVD player (24).

As described at paragraphs [0040] and [0057], the players may press "up", "down" buttons of the remote controls (36a,36b) to browse through game options displayed in the form of an interactive menu, before selecting a highlighted game option by pressing, for instance, an "Enter" or "Menu" button. Thereafter, in response to the first transmitted signal from the remote controls (36a,36b) the DVD player (24)

is configured to display a media file indicative of the game option selected in the interactive menu.

Where two players try to browse through the menu options simultaneously, one player may use the up arrow key command whilst the other player may use the down arrow key command. Accordingly, this situation results in a conflict arising due to the concurrently transmitted command signals. Such a conflict will occur even if both players try to use the up arrow key command on their respective remote controls to browse through the menu options because the two up arrow key commands activated on the respective remote controls produce a similar signal.

To avoid such a conflict arising, Barri further teaches the use of a "Buzz in" step in which each player is required to first "buzz in" before making a game selection (see paragraph [0053]). This "buzz in" step allows the communication subsystem (34) to resolve which remote control (36a,36b) was the first to transmit a signal, and thereafter, the player operating the remote control which is deemed by the communication subsystem (34) to have been the first to transmit, is allowed to make a game selection - that is, by using the remote control buttons to browse through the game options in the interactive menu and then selecting the desired highlighted game option by activating the "buzz in" button again. Notably, upon determining the first remote control (either 36a,36b) to transmit, the communication subsystem (34)

transmits the wireless signal to the DVD player for processing which was produced by the determined first activated remote control (36a,36b), but, this does not automatically result in a game option being selected. Instead, the transmission of the wireless signal to the DVD player merely instructs the DVD player to indicate on a display which of the remote controls (36a,36b) was the first to transmit, and, a menu of game options available for selection by the player using the first activated remote control (36a,36b). Further user inputs are required by the player operating the first activated remote control (36a,36b) in order to effect the selection as described above.

Unfortunately, Barri tends to be an inefficient means of playing a DVD-based game because it involves multi-step activation of the remote control (36a,36b) buttons in making a game selection. The delays involved in terms of first activating the "buzz-in" button to determine the "first player", then browsing through the interactive menu to highlight a game option, then having to activate the "buzz-in" button once more to select the highlighted game option slows down the pace of game flow and may detract from the overall enjoyment of playing the game.

Barri's means for resolving a near simultaneous transmission of signals from the remote controls (36a,36b) also teaches that the "buzz in" buttons (44) and (46) on the remote controls (36a, 36b) respectively (as shown in Fig. 4) are configured to produce different command signals - that is, by way of example, an "Enter" signal and

a "Menu" signal respectively. The communication subsystem (34) is therefore required to simply identify which command signal has been received first in order to determine which of the remote controls (36a,36b) was used first to "buzz in" during play of the game. Moreover, the different command signals produced by the buttons (44) and (46) of the remote controls (36a,36b) are command signals which are ordinarily processed by the DVD player (24) to control operation of the DVD player (24) (see paragraph [0035]).

However, the means of resolving near simultaneous transmission of signals as taught by Barri would appear to only be suitable for use in a wired system such as is shown in Fig. 4 of Barri and would not be suitable for resolving near simultaneous transmission in a wireless system in which remote controls (36a,36b) utilize infrared signal transmission. Firstly, because the "buzz in" signals used by Barri are command signals ordinarily used to control operation of the DVD player (24), if the "buzz in" signals were to be transmitted wirelessly from the remote controls (36a,36b), then both the communication subsystem and the DVD player (24) would receive and process the "buzz in" signals. Consequently, the DVD player would be prone to premature and unpredictable operation as it would be acting upon both command signals received directly from the remote controls (36a,36b) as well as the command signal subsequently transmitted from the communication subsystem (34) after

resolving the first to transmit. Secondly, because the "buzz in" signals transmitted wirelessly from the remote controls (36a,36b) are infrared, the "buzz in" signals will collide and distort in the medium of space and will result in unpredictable processing by both the communication subsystem (34) and the DVD player (24). The communication subsystem (34) for instance, would not be able to determine which of the remote controls (36a,36b) has transmitted first because the "buzz in" signals transmitted by each of the remote controls (36a,36b) will have collided and distorted rendering it difficult to distinguish between the received signals and effect proper resolution of the conflict. This is why Barri only teaches the means of resolving near simultaneous transmission of signals in the context of a wired system as shown in Fig. 4 as it is unsuitable for implementation in a wireless-based system.

In summary, the Barri invention exhibits at least two significant problems:

(I) The use of multi-step activation of the remote controls (36a,36b) during game play is inefficient and detracts from the overall pace and enjoyment in playing the game;

(ii) The means for resolving near simultaneous transmission of signals from the remote controls (36a,36b) is only effective in a wired transmission as described in paragraphs [0033] to [0035] and with reference to Fig. 4 because the "buzz in" signals that are transmitted to the communication subsystem (34) from the remote

controls (36a,36b) are command signals that are ordinarily used to control operation of the DVD player. That is, the simultaneously transmitted infrared signals will be received by the DVD player (24) either at the same time or slightly before receiving a command signal from the communication subsystem (34) so as to give rise to premature and/or unpredictable operation by the DVD player (24). Furthermore, because the "buzz in" signals are infrared signals, they are prone to collision and distortion in the medium of space and not only would the communication subsystem be unable to properly resolve the collided and distorted infrared wireless signals, but also, the DVD player would also operate unpredictably due to this distortion.

Present Invention

In contrast, the present invention is a game apparatus for use with a media file reading and display apparatus (e.g. a DVD player) operable by wireless signals through a wireless receiver. At least two wireless signal transmitter units (e.g. remote controls) produce wireless signals in response to user inputs entered into the wireless signal transmitter units via single-step actuation of the wireless signal transmit units (e.g. by a single-press of a control button of remote controls).

The wireless signals produced by the wireless signal transmitter units are not indicative of signals ordinarily processed by the media file reading and display apparatus (e.g. are not indicative of command signals such as "Enter" "Menu" "Stop"

"Play" etc, see p 10 lines 1-19), and, each of the wireless signals include a comparison code and an operational code component (p17 line 9 - p21 line 3, and, p24 line 16 - p31 line 10).

The present invention also includes a means for resolving near simultaneous operation of the wireless signal transmitter units which is contained in each of the wireless signal transmitter units (p13 line 20 - p14 line 2). The means for resolving is adapted to initially receive the comparison code components of near simultaneously transmitted wireless signals produced by the wireless signal transmitter units during game play without initially receiving the operational codes of the wireless signals. The means for resolving determines a "first unit" (from amongst the at least two wireless signal transmitted units) deemed to have first transmitted a wireless signal by reference to the received comparison codes of the transmitted wireless signals.

Thereafter, upon determining the "first unit", the operational code of the wireless signal transmitted from the "first unit" is automatically transmitted for processing by the media file reading and display apparatus (p13 line 11 - p14 line 2). The operational code enables a direct single-step selection and display of a media file via imposed offset addressing wherein the direct selection and display of the media file is indicative of a game option being made during game play without a

further user input being required (p24 line 16 - p25 line 2, and, p26 line 15 - p31 line 5).

Comparison between Present Invention and Barri

The Applicant submits that the invention of claim 2 recites at least one feature which is not taught by the cited prior art and claim 2 is therefore nonobvious.

Single-Step Actuation

Firstly, the present invention enables players to effect a game selection via a single-step actuation of the wireless signal transmitter units. That is, each comparison code of the transmitted wireless signals are received by the means for resolving in each of the wireless signal transmitter units and as they each determine which is the "first unit", the "first unit" is then able to automatically transmit only the operational code of its wireless signal for processing by the media file reading and display apparatus. Furthermore, because the operational code which is transmitted to the media file reading and display apparatus effects imposed offset addressing to a media file such that a media file may be directly retrieved and displayed which corresponds directly to a game option selected by a player operating the "first unit" with a single press of a button without any additional user inputs being required.

In contrast, the Barri invention clearly requires multi-step actuation of the remote control buttons. That is, players are required to first "buzz in" in order to

resolve the first player to transmit, then the first player to transmit must browse through the game options in the displayed interactive menu, and thereafter, the player must buzz in again in order to select a highlighted game option in the interactive menu.

The present invention is therefore more efficient than the Barri invention and unlike Barri, does not adversely affect the pace of game flow and the overall enjoyment of the game.

Suitable for Infrared Wireless System

Secondly, the present invention includes a means for resolving the first unit to transmit which is suitable for use in an infrared wireless signal transmission system. In particular, because it is only the comparison code components of the wireless signals that are initially transmitted to the means for resolving, and, because the comparison code components are not command signals which are ordinarily used to control operation of the media file reading and display apparatus, the transmission of the wireless signals in infrared from the wireless signal transmitter units will not cause premature or unpredictable operation of the media file reading and display apparatus as is the case in Barri. Moreover, once the means for resolving determines the "first unit", thereafter, it is only the operational code of the wireless signal produced by the "first unit" that is automatically transmitted to the media file reading

and display apparatus for processing - that is, only one operational code is transmitted for processing at any given time so that there will not be any collision and distortion of infrared signals that would otherwise compromise operation of the media file reading and display apparatus.

In contrast, because the means for resolving near simultaneous transmission of signals in Barri involves the use of command signals which are ordinarily used to operate the DVD player as the "buzz in" signals for each remote control, the Barri system is unsuitable for use in the context of an infrared wireless system. This is because the "buzz in" signals which are initially transmitted by the remote controls (36a,36b) during resolution of near simultaneous transmission would be received by the DVD player prematurely (i.e. at the same time as the communication subsystem rather than after the communication subsystem has first had time to receive and process the "buzz in" signals and then transmit a command signal to the DVD player to indicate the first remote control activated during gameplay). Consequently, the above scenario may cause unpredictable operation of the DVD player as a result of prematurely receiving the "buzz in" signals directly from the remote controls (36a,36b). Furthermore, Barri is not able to transmit the command signals wirelessly in infrared as the signals would collide and distortion thereby resulting in improper operation of the DVD player.

The Applicant submits that one of ordinary skill in the art would not be motivated to combine the teachings of Barri with other cited prior art or the common general knowledge in order to arrive at the invention of claim 2 given the apparent lack of suitability of the Barri invention in resolving near simultaneous transmission of wireless signals. Moreover, in order for Barri to be modified in order to be suitable for use in the context of a wireless system, considerable technical modification of the Barri invention would be required in order for it to function appropriately in this context. Therefore, to suggest that the invention of claim 2 would be obvious is based upon excessive use of hindsight analysis which fails to properly take into account the above considerations.

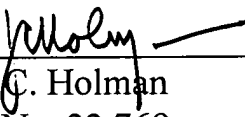
The present invention is therefore more versatile than the Barri invention in that the means for resolving near simultaneous transmission of signals as recited in claim 2 may be implemented in both a wired system as well as a wireless system such as is used in the context of infrared remote controlled operation of a DVD player.

Based on the foregoing amendments and remarks, it is respectfully submitted that the claims in the present application, as they now stand, patentably distinguish over the references cited and applied by the Examiner and are, therefore, in condition for allowance. A Notice of Allowance is in order, and such favorable action and reconsideration are respectfully requested.

However, if after reviewing the above amendments and remarks, the Examiner has any questions or comments, he is cordially invited to contact the undersigned attorneys.

Respectfully submitted,

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